CLAIMS

We claim:

1. A load lowering system, comprising:

a. at least one friction rod vertically mounted on a building;

b. a friction collar disposed around said friction rod;

c. means for creating a friction force between said friction collar and said friction rod that resists movement of said friction collar over said friction rod;

d. at least one glide rod vertically mounted on a building, said glide rod being spaced apart from and parallel to said friction rod, said glide rod including a spiral groove and a spiral vane formed thereon;

e. a glide collar disposed around said glide rod, said glide collar including means for engaging said thread on said glide rod 12 thereby causing said glide rod to rotate as said glide collar travels over said glide rod; and,

f. a support platform disposed perpendicularly to said friction rod and said glide rod, said support platform being supported by said glide collar attached to said glide rod.

2. The load lowering system, as recited in Claim 1, wherein said means for creating the amount of friction force is a plurality of biased friction points on said friction collar that press against said friction rod.

3. The load lowering system, as recited in Claim 2, wherein said friction collar includes means for adjusting the amount of friction force between said friction collar and said friction rod.

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4. The load lowering system, as recited in Claim 3, wherein said means for adjusting the amount of friction forces are adjustment springs that adjust the amount of biasing forces extended by said friction points.

5. The load lowering system, as recited in Claim 1, wherein said friction rod varies in diameter along its length thereby changing the amount of frictional force applied by said friction collar to said friction rod.

6. The load lowering system, as recited in Claim 2, wherein said friction rod varies in diameter along its length.

7. The load lowering system, as recited in Claim 1, wherein said glide collar includes an upper bearing plate securely attached to said support platform and a rotating lower bearing plate that rotates around said glide rod when said support platform moves longitudinally over said glide rod.

8. The load lowering system, as recited in Claim 7, wherein said friction collar includes means for adjusting the amount of friction force exerted by said means for creating friction force between said friction collar and said friction rod.

9. The load lowering system, as recited in Claim 8, wherein said friction collar includes means for adjusting the amount of friction force exerted by said friction collar on said friction rod.

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10. The load lowering system, as recited in Claim 9, wherein said friction rod varies in diameter along its length to vary the amount of frictional force exerted by said friction collar on said friction rod.

11. The load lowering system, as recited in Claim 7, further including a set of bearings disposed between said upper bearing plate and said lower bearing plate enabling said lower bearing plate to rotate relative to said upper bearing plate.

12. The load lowering system, as recited in Claim 8, further including a retaining ring attached to the bottom surface of said upper bearing plate and used to hold said lower bearing plate under said upper bearing plate.

13. The load lowering system, as recited in Claim 11, further including at least one vane glide plate attached to said lower bearing plate that slides over said spiral vane on said glide rod as said glide collar moves longitudinally over said glide rod.

14. The load lowering system, as recited in Claim 12 further including at least one vane glide plate attached to said lower bearing plate that slides over said spiral vane on said glide rod as said glide collar moves longitudinally over said glide rod.

15. The load lowering system, as recited in Claim 1 further including a collapsible canopy attached to said support platform.

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16. The load lowering system, as recited in Claim 1 further including an upper frame assembly located above said support platform said upper frame assembly being attached to said friction collars when attached to said friction rods.

17. The load lowering system, as recited in Claim 16 further including a canopy disposed between said upper frame assembly and said support platform.

18. The load lowering system, as recited in Claim 1 further including a hitch bracket attached to each said friction rod for holding said support platform in a stored raised position when not in use.

19. The load lowering system, as recited in Claim 17, further including a release lever coupled to said support platform to disengage said support platform from said bracket to allow said support platform to descend over said friction rod and said glide rod to a loading position.

20. The load lowering system, as recited in Claim 1, further including a cable attached to said support platform used to raise said support platform on said friction rod and said glide rod.

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